Selected References for the History of Surgical Anesthesia (Concluded).

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Foreword

IN THE PREVIOUS ISSUE of Current Researches in Anesthesia and Analgesia there appeared the first installment of Major Keys' classified bibliography of anesthesia. This comprised the general discussion of anesthesia and included the ether controversy. The entire concept of anesthesia was not accepted until the advent of Morton, Snow and Simpson. Up to the end of the first quarter of the twentieth century there was little change in methods and few suggestions of other agents. With advances in chemistry and pharmacology numerous discoveries were made both in technique and anesthetics. In the accompanying contribution many references will be found on such recent developments as intravenous anesthesia, refrigeration anesthesia, and continuous caudal anesthesia. Writers on anesthesiology will find that search for necessary references will be greatly facilitated if these two installments by Major Keys are kept on an easily accessible shelf. They will be included in a book by the author on the history of anesthesia, to be published by Henry Schuman of New York.

HOWARD DITTRICK, M.D.

Intravenous Anesthesia

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M. G. Marin of Mexico introduces clinical intravenous use of ethyl alcohol, 1929.

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XVI.

Aus der Königlichen chirurgischen Klinik zu Kiel.

Versuche über Cocainisirung des Rückenmarkes.

Von

Prof. Dr. August Bier.

Die Schleich'sche Infiltrations- und die Oberst'sche regionäre Cocainanästhesie haben die gefährliche allgemeine Narkose in sehr wesentlicher und erfreulicher Weise beschränkt. Aber für „grosse" Operationen sind beide Verfahren doch nur im geringen Grade verwendbar. Ich habe den Versuch gemacht, durch Cocainisirung des Rückenmarkes grosse Strecken des Körpers unempfindlich gegen Schmerz zu machen. Dies wurde in folgender Weise ausgeführt:

Bei dem in Seitenlage befindlichen Kranken wird die Quincke'sche Lumbalpunktion in bekannter Weise vorgenommen. Die Hohlnadel wählt man sehr dünn. Nachdem sie in den Sack der Rückenmarkshäute eingedrungen ist, entfernt man den Stöpsel, welcher die Lichtung der Nadel verschliesst, und setzt sofort den Finger auf die Mündung, damit möglichst wenig Liquor cerebrospinalis ausfliesst. Mit einer Pravaz'schen Spritze, welche genau auf die Punktionsnadel passt, wird die gewünschte Menge Cocain eingespritzt. Dabei muss man natürlich bei der Länge der Nadel so viel Cocainlösung mehr nehmen, als die Lichtung derselben fasst. (Bei unserer Nadel 1½ Theilstriche der Pravaz'schen Spritze.) Damit das Cocain nicht aus dem Stichkanale der Rückenmarkshäute in die Gewebe sickert, lässt man die Nadel mit der daraufsitzenden Spritze 2 Minuten stecken und entfernt sie dann. Die Stichöffnung in der Haut wird mit Collodium verklebt.

Die Lumbalpunktion wird unter Schleich's Infiltrationsanästhesie schmerzlos ausgeführt. Zuerst wird die Haut, dann werden mit einer langen Nadel die übrigen Weichtheile bis auf die Wirbelsäule infiltrirt.

Fig. 2. August Bier's first paper on true spinal anesthesia, first page (from Deutsche Ztschr. f. Chir., 51:361-369 [Apr.] 1899).

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ACCORDING TO COHEN and his associates, azosulfamide has been demonstrated to exhibit anticonvulsant action in patients with epilepsy. Associated with the anticonvulsant effect, alterations in the concentration of chemical constituents of the serum were described. These included a decrease in the carbon dioxide content of the serum, a decrease in the carbon dioxide combining power of the serum and an elevation in serum chlorides. The authors investigated the nature of the metabolic changes associated with ingestion of azosulfamide and with phenobarbital, a drug with anticonvulsant properties. Administration of azosulfamide is accompanied by a decrease in the carbon dioxide content and the carbon dioxide tension of the serum. The decreased carbon dioxide content and the lowered carbon dioxide tension of serum accompany the anticonvulsant effect. The anticonvulsant effect of both azosulfamide and phenobarbital coincides with a positive potassium balance. Ammonium chloride produces the same degree of "acidosis" as does azosulfamide, without alteration of potassium exchange, and does not have an anticonvulsant effect. Phenobarbital produces no "acidosis" but a positive potassium balance and has an anticonvulsant effect. This suggests that "acidosis" is not necessarily the crucial factor in anticonvulsant action.